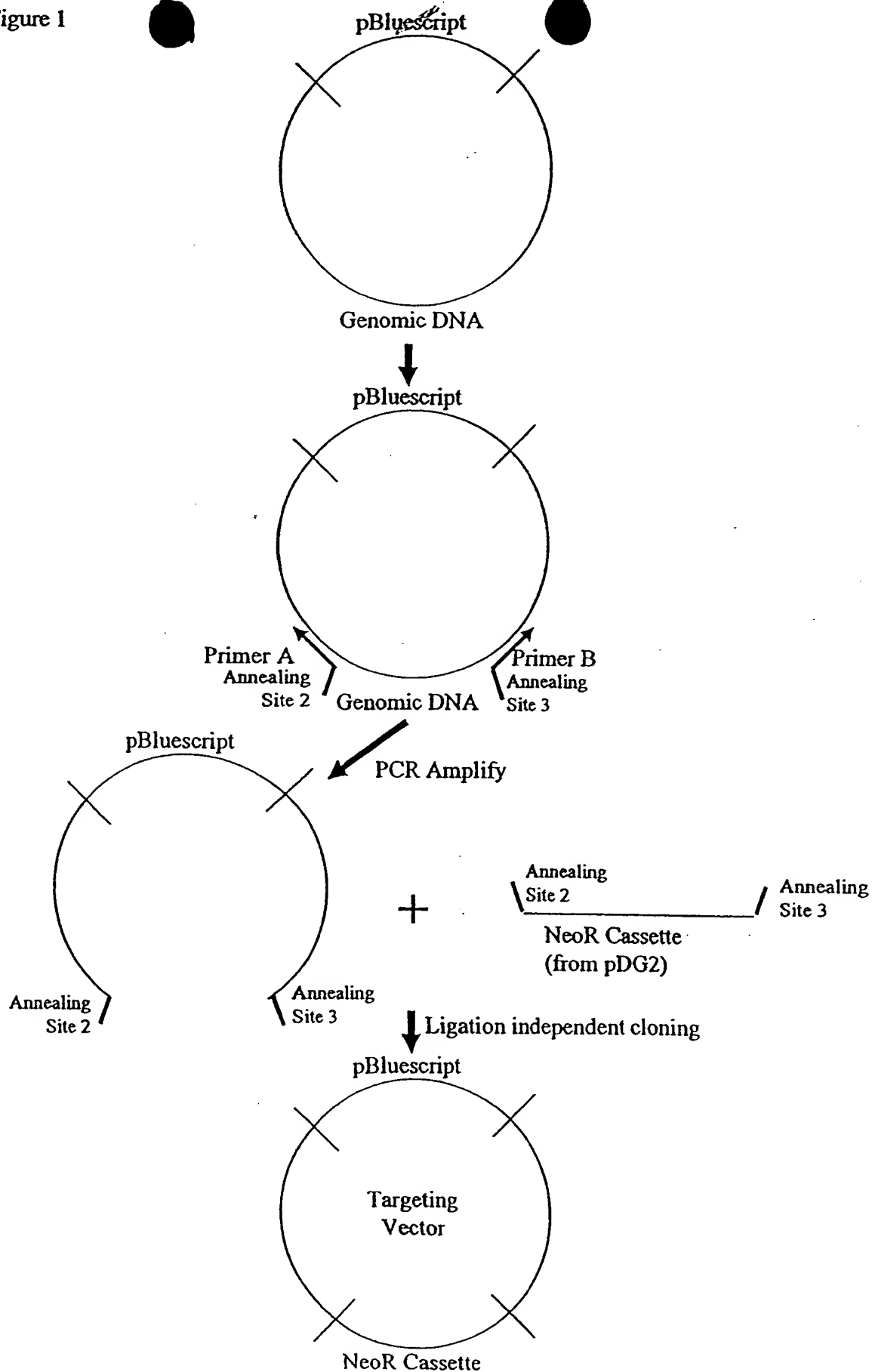


Figure 1



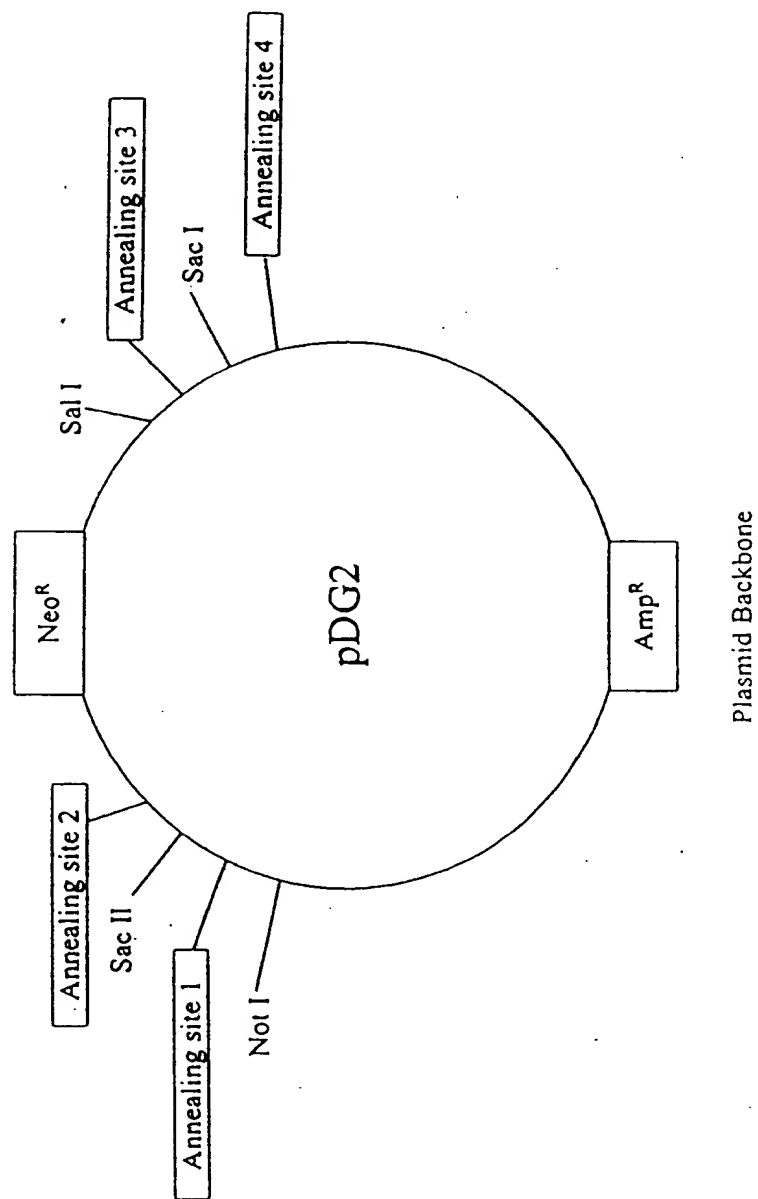


FIGURE 2A

FIGURE 2B

pDG2:

GTAACTACGTACGGTGGCACTTTTCGGGGAAATGTGCGCGGAACCCCTATTGTTTATTTTCTAAATACATTCAAATA
TGTATCCGCTCATGAGACAATAACCTGATAAATGCTTCAATAATATTGAAAAAGGAAGATGAGTATTCAACATTTT
CGTGTGCGCCCTTATTCCTTTTTTTCGGGCATTTTGCTTCTGTTTTTGCTCACCAGAAACGCTGGTGAAGTAAAGA
TGCTGAAGATCAGTTGGGTGCACGAGTGGGTTACATCGAAGTGGATCTCAACAGCGGTAAGATCCTTGAGAGTTTTCGCC
CCGAAGAACGTTCTCAAATGATGAGCACTTTTAAAGTTCTGCTATGTGGCGCGGTATTATCCCGTGTGACGCCGGGCAA
GAGCAACTCGGTGCGCGCATACACTATTCTCAGAAAGACTTGGTTGAGTACTCACCAGTCAAGAAAAAGCATCTTACGGA
TGGCATGACAGTAAGAGAATTATGCAAGTGTGCCATAACCATGAGTGATAAAGTGGCGGCAACTTACTTCTGACAACGA
TCGGAGGACCGAAGGAGCTAACCGCTTTTTTGCAACATGGGGGATCATGTAAGTGGCTTGGGAAACCGGAG
CTGAATGAAGCCATACCAACGACGAGCGTGACACCAGATGCGCTGAGCAATGGCAACACGTTGCGCAAACTATTAAAC
TGGCGAACTACTTACTCTAGCTTCCCGGCAACAATTAATAGACTGGATGGAGGCGGATAAAGTTGCAGGACCACTTCTGC
GCTCGGCCCTTCCGGCTGGCTGGTTTTATTGCTGATAAATCTGGAGCGGTGAGCGTGGGTCTCGCGGTATCATTGCAGCA
CTGGGGCCAGATGGTAAGCCCTCCCGTATCGTAGTTATCTACACGAGCGGGAGTCAAGCAACTATGGATGAACGAAATAG
ACAGATCGCTGAGATAGGTGCTCACTGATTAAGCATTGGTAAGTGTGAGCAAGTTTACTCATATATACTTTAGATTG
ATTTACCCCGTTGATAATCAGAAAAAGCCCAAAAACAGGAAGATTGTATAAGCAATATTAAATTTGTAACGTTAATA
TTTTGTTAAATTCGCGTTAAATTTTTGTTAAATCAGCTCATTTTTTAACCAATAGGCGGAAATCGGCAAAATCCCTTAT
AAATCAAAGAATAGCCCGAGATAGGGTTGAGTGTGTTCCAGTTTGAACAAGAGTCCACTATTAAAGAACGTTGGACTC
CAACGTCAAAGGCGAAAAACCGTCTATCAGGGCGATGGCCCACTACGTGAACCATCACCAGTCAAGTTTTTGGGGT
CGAGGTGCGTAAAGCACTAAATCGGAACCTAAAGGGAGCCCCGATTAGAGCTTGACGGGGAAGCGAAGCTGGCGA
GAAAGGAAGGGAAGAAAGCGAAAGGAGCGGGCGTAGGGCGCTGGCAAGTGTAGCGGTCAAGTGGCGGTAAACCGGGGTTCTGTCAC
CCCGCGCGCTTAATGCGCGCTACAGGGCGCGTAAAGGATCTAGGTGAAGATCCTTTTTGATAATCTCATGACCAAAA
TCCCTTAAAGTGAAGTTTTCGTTCCACTGAGCGTCAAGCCCGTAGAAAAGATCAAAGGATCTTCTTGAGATCCTTTTTTT
CTGCGCGTAATCTGCTGCTTGCAAAACAAAAAACACCGCTACCAGCGGTGGTTGTTTGGCGGATCAAGAGCTACCAAC
TCTTTTTCCGAAGGTAAGTGGCTTACGACAGAGCGCAGATACCAAACTACTGTTCTTCTAGTGTAGCCGTAGTTAGGCCACC
ACTTCAAAGACTCTGTAGCACCGCTACATACCTGCTCTGCTAATCCTGTTACAGTGGCTGCTGCGAGTGGCGATAAG
TCGTGCTTACCGGGTTGGACTCAAGACGATAGTTACCGGATAAGGCGCAGCGGTCCGGCTGAACCGGGGTTCTGTCAC
ACAGCCAGCTTGGAGCGAACGACCTACACCGAAGTGAATACCTACAGCGTGAGCTATGAGAAAGCGCCACGCTTCCCG
AAGGGAGAAAGGCGGACAGGTATCCGGTAAGCGGCGAGGTGGGAACAGGAGAGCGCACGAGGAGGCTTCCAGGGGGAAC
GCCTGGTATCTTTATAGTCTGTGCGGTTTCGCCACCTCTGACTTGAGCGTGGATTGTTGATGCTCGTCAGGGGGGCG
GAGCCTATGGAAGAACCGCAGCAACGCGGCTTTTTACGGTTCTTGGCCTTTTGTGCTGCTCATGTAAATGTT
AGTTAGCTCACTCATTAGGCAACCCAGGCTTTACCTTTATGCTTCCGGCTCGTATGTTGTTGGAATTTGAGCGGATA
ACAATTTACACAGGAACAGCTATGACCATGATTACGCCAAGCTACGTAATACGACTCACTAGGCGGCGCGTTTAAAC
AATGTGCTCCTCTTGGCTTGCTTCCGCGGGCCAGCCAGACAAGAACAGTTGACGTCAAGCTTCCCGGACGCGTGCT
AGCGGCGCGCGCAATTCCTGAGGATTGAGGGCCCCCTGACGGTCAATTCTACCGGGTAGGGGAGGCGCTTTCCCAAGG
CAGTCTGGAGCATGCGCTTTAGCAGCCCCGCTGGCACTTGGCGCTACACAAGTGGCTCTGCGCTCGCACATTTCCACA
TCCACCGGTAGCGCAACCGGCTCGGTTCTTGGTGGCCCTTTCGCGCCACCTTCTACTCTCCCTAGTCAGGAAGTTT
CCCCCGCCCCGCGCTCGCTGCTGAGGACGTCGCAAAATGGAAGTAGCAGCTCTCACTAGTCTCGTGAGATGAGCAG
CACCGCTGAGCAATGGAAGCGGTAGGCTTTGGGGCAGCGGCCAATAGCAGCTTGTCTCTTCTGCTTCTGGGCTCAGA
GGCTGGGAAGGGTGGGTGCGGGGCGGGCTCAGGGGCGGGCTCAGGGGCGGGCGGGCGGAAGGTCCTCCGAGGCCC
GGCATTCTCGACGCTTCAAAGCGCAGCTGTCGCGCGCTGTTCTCTCTTCTCATCTCGGGCCTTTCGACCTGCAGC
CAATATGGGATCGGCCATTGAACAAGATGGATTGCACGAGGTTCTCGGCCGCTTGGGTGGAGAGGCTATTCCGCTATG
ACTGGGCACAACAGACAATCGGCTGCTCTGATGCGCGCTGTTCCGGCTGTGAGCGCAGGGGCGCCCGTTCTTTTGTG
AAGACCGACCTGTCGGTGCCTGAATGAAGTGCAGGACGAGGCGCGGCTATCGTGGCTGGCCACGACGGGCGTTCC
TTGCGCAGCTGTGCTCGACGTTGTCACTGAAGCGGAAGGGACTGGTGCTATTGGGCGAAGTCCGGGGCAGGATCTCC
TGTCATCTACCTTGCTCCTGCGGAGAAAGTATCCATCATGGCTGATGCAATGCGGCGGCTGCATACGCTTGATCCGGCT
ACCTGCCCATTCGACCACCAAGCGAAACATCGCATCGAGCGAGCAGTACTCGGATGGAAGCCGGTCTTGTGATCAGGA
TGATCTGGACGAAGAGCATCAGGGGCTCGCGCCAGCGCAACTGTTCCGCAAGTCAAGCGCGCATGCCGAGCGGATG
ATCTCGTGTGACCATAGGCGATGCTGCTTCCGGAATATCATGGTGGAAAAATGGCCGCTTTCTGATTTCATGCACTGT
GGCCGGCTGGGTGTCGGGACCGCTATCAGGACATAGCGTTGGCTACCCGTGATATTGCTGAAGAGCTTGGCGCGAATG
GGCTGACCGCTTCTCTGCTTTACGGTATCGCGCTCCCGATTGCGAGCGCATGCGCTTCTATCGCTTCTTGACGAGT
TCTTCTGAGGGGATCGATCCGTCTGTAAAGTCTGCAGAAATGATGATCTATTAAACAATAAAGATGTCCACTAAATGG
AAGTTTTCTCTGTCATCTTTGTTAAGAAGGGTGAGAACAGAGTACCTACATTTGAATGGAAGGATTGGAGCTACGGG
TTGGGATCATAATTTAAACAAGCAAAACCAATTAAGGGCCAGCTCATTCTCCCACTCATGATCTATAGATCTATAGA
TCTCTCGTGGGATCATTGTTTTCTCTGATTCCCACTTTGTTGGTTCTAAGTACTGTGGTTTCAAATGTGTCAGTTTCA
TAGCCTGAAGAACGAGATCAGCAGCTCTGTTCCACATACATTTCACTCTCAGTATTGTTTGGCAAGTTCTAATCCAT
CAGAAGCTGACTCTAGATCTGGATCCGGCCAGCTAGGCGCTCGACCTCGAGTGTACAGGTACCAAGGTCCTCGCTCTGT
TCCGTTGAGCTCGACGACACAGGACCGCAAAATTAAGGCGGCGGCTACCTCTAGTCAAGGCTTAAAGTGAAGTGC
TATTACGGAAGTGGCGCTGTTTTACACGCTGCTGACTGGGAAAAACCTGGCGTTACCCAACTAATCGCTTGCAGCACA
TCCCCCTTTCGCGAGCTGGCGTAATAGCGAAGAGGCCCCGACCGATCGCCCTCCCAACAGTTGCGCAGCCTGAATGGCG
AATGGCGCTTCCGTTGGTAATAAGCCGCTTCGGCGGCTTTTTTTT

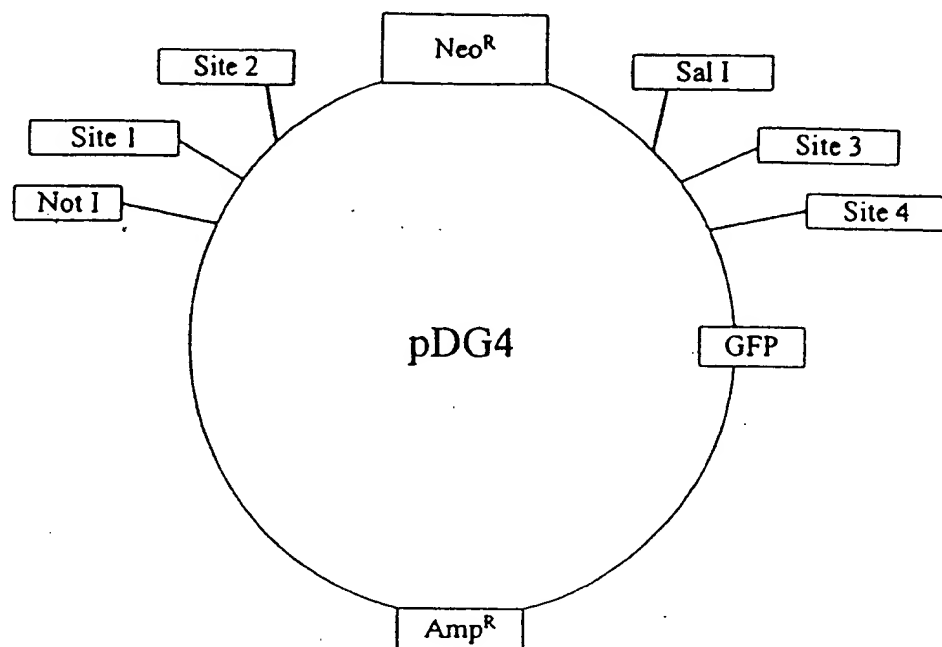


FIGURE 3A

FIGURE 3B

pDG4:

GTTTAAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATATGGAGTTCGCGTTACATAAATTACGGTAAATGG
CCCGCTGGCTGACCGCCCAACGACCCCGCCCATGACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGA
CTTCCCAATGACGTCAATGGGTGGAGTATTTACGGTAACTGCCACTTGGCAGTACATCAAGTGTATCATATGCCAAGT
ACGCCCCCTATTGACGTCAATGACGGAATGGCCCGCTGGCATTAAAGCCAGTACATGACCTTATGGGACTTTCCTAC
TTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGATGCGGTTTTGGCAGTACATCAATGGGCGTGATAGC
GGTTTTGACTCACGGGGATTTCCAAGTCTCCACCCCATGACGTCAATGGGAGTTTGTGTTGGCACCAAAATCAACGGGAC
TTTCCAAAATGTCGTAACTCCGCCCCATTGACGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAG
AGCTGGTTTAGTGAAACCGTCAGATCCGCTAGCGCTACCGGTCGCCACCATGGTGAGCAAGGGCGAGGAGCTGTTACCGG
GGTGGTGCCCATCTGGTCGAGCTGGACGGGACGTAAACGGCCACAAGTTACGGTGTCCGGCGAGGGCGAGGGCGATG
CCACCTACGGCAAGCTGACCTGAAGTTCTCTGCACCACCGGCAAGCTGCCCGTGGCCCGCCCTCGTGACCACC
CTGACCTACGGCGTGCACTGCTTACCGCTACCCCGACCATGAAGCAGCAGACTTCTTCAAGTCCGCCATGCCCGA
AGGCTACGTCCAGGAGCGCACCCTCTTCTCAAGGACGACGGCACTACAAGACCGCGCGGAGGTGAAGTTGAGGGGG
ACACCTGGTGAACCGCATCGAGCTGAAGGGCATCGACTTCAAGGAGGACGGCAACATCTGGGGCACAAGCTGGAGTAC
AACTACAACAGCCACAACGTCTATATCATGGCCGACAGAGCAAGAACGGCATCAAGGTGAACCTCAAGATCCGCCACA
CATCGAGGACGGCAGCGTGCACTCGCGACCACTACAGCAGAACACCCCATCGGCGACGGCCCGTGTCTGCCCG
ACAACCACTACCTGAGGACCCAGTCCGCCCTGAGCAAGACCCCAACGAGAAGCGGATCAGATGGTCTGCTGGAGTTT
GTGACCGCGCGGGATCACTCTCGGCATGGACGAGCTGTACAAGTCCGGAATCAGATCCACCGGATCTAGATAACTGAT
CATAATCAGCCATACCACATTTGTAGAGGTTTACTGTCTTAAAAAACCTCCACACCTCCCGCTGAACCTGAAACATA
AAATGAATGCAATTGTTGTTAACTGTTTATTGACGTATAATGGTTACAAATAAGCAATAGCATCAAAATTTT
ACAAATAAGCATTTTTTCACTGCATTCTAGTTGGTTGTTGCCAACTCATCAATGTATCTTAAAGCGAACTCTGCA
AGTGGCACTTTTCGGGGAAATGTGCGCGGAACCCCTATTGTTTATTTTCTAAATACATTCAAATATGTATCCGCTCAT
GAGACAATAACCTGATAAATGCTTCAATAATATTGAAAAAGGAAGAGTATGAGTATTCAACATTTCCGTGTGCGCCTTA
TTCCCTTTTTTGGCGCATTTTGCCCTTCTGTTTTGCTCACCAGAAACGCTGGTGAAGTAAAGATGCTGAAGATCAG
TTGGGTGACAGAGTGGGTACATCGAAGTGGATCTCAACAGCGGTAAGATCCTTGAGAGTTTTGCGCCGGAAGAACGTTT
TCCAATGATGAGCACTTTTAAAGTTCTGCTATGTGGCGGATTTATCCCGTGTGACCGCGGCAAGAGCAACTCGGT
GCCGATACACTATTCTCAGAATGACTTGGTTGAGTACTCACCAGTACAGAAAAGCATCTTACGGATGGCATGACAGTA
AGAGAATTATGCAGTGTGCCATAACCATGAGTGATAACACTGCGGCCAATCTACTTCTGACAACGATCGGAGGACCGAA
GGAGCTAACCGCTTTTTTGCAACATGGGGGATCATGTAATCGCTTGATCGTTGGGAACCGGAGCTGAATGAAGCCA
TACCAACGACGAGCGTGACACACCATGCTGTAGCAATGGCAACAACTGCGCAAACTATTAAGTGGCGAACTACTT
ACTCTAGCTTCCCGGCAACAATTAAGACTGGATGGAGCGGATAAAGTTGCAGGACCACTTCTGCGCTCGGCCCTTCC
GGCTGGCTGGTTTATGCTGATAAATCTGGAGCCGGTGAGCGTGGTCTCGCGGTATCATTCGAGCACTGGGGCCAGATG
GTAAGCCCTCCGTATCGTAGTTATCTACAGCAGGGGAGTCAGGCAACTATGGATGAACGAAATAGACAGATCGCTGAG
ATAGGTGCCTCACTGATTAAGCATTGGTAAGTGTGACACCAAGTTTACTCATATATACTTTAGATTGATTTACCCCGGTT
GATAATCAGAAAAGCCCCAAAACAGGAAGATTGTATAAGCAAAATTTAAATTGTAACGTTAATAATTTGTTAAATTT
CGCGTTAAATTTTTGTTAAATCAGCTCATTTTTTAACCAATAGGCGGAAATCGGCAAAATCCCTTATAAATCAAAAGAA
AGCCCGAGATAGGGTTGAGTGTGTTCCAGCTTGGAAACAGAGTCCACTATTAAGAACGTTGAGTCCAAAGCTCAAAGG
GCAAAACCGTCTATCAGGCGGATGGCCCACTACGTGAACCATCACCCAAATCAAGTTTTTGGGGTGGAGGTGCGGTAA
AGCACTAAATCGGAACCTTAAAGGGAGCCCCGATTTAGAGCTTGACGGGAAAGCGAACGTTGGCGAGAAAGGAAGGGAA
GAAAGCGAAAGGAGCGGGCGCTAGGGCGCTGGCAAGTGTAGCGGTACGCTGCGCGTAACCAACACACCCCGCGCTTA
ATGCGCGCTACAGGGCGCGTAAAGGATCTAGGTGAAGATCCTTTTTGATAATCTCATGACCAAAATCCCTTAAAGTGA
GTTTTCGTTCCACTGAGCGTCAGACCCCGTAGAAAAGATCAAAGGATCTTCTTGAGATCTTTTTTCTGCGGTAATCT
GGTGCTTGCAACAAAAAACCAACCGCTACCGAGCGTGGTTTTGTTGGCGGATCAAGAGTACCAACTCTTTTTCCGAAG
GTAAGTGGCTTACGAGAGCGCAGATACCAATACTGTTCTTCTAGTGTAGCGTAGTTAGGCCACCACTTCAAGAACTC
TGTAGCACCGCTACATACCTCGCTGCTAATCCTGTTACCAGTGGCTGCTGCCAGTGGCGATAAGTCGTGTCTTACCG
GGTTGGACTCAAGACGATAGTTACCGGATAAGGCGCAGCGGTGCGGCTGAACGGGGGGTTCGTGCACACAGCCAGCTTG
GAGCGAACGACCTACACCGAATGAGATACCTACAGCGTGAGCTATGAGAAAGCGCCACGCTTCCCGAAGGGAGAAAGGC
GGACAGGTATCCGGTAAGCGGCGGGTCGGAACAGGAGAGCGCAGAGGAGCTTCCAGGGGAAACGCTCGGTATCTTT
ATAGTCTGTGCGGTTTTGCCACCTCTGACTTGAGCGTCAATTTTTGTGATGCTCGTCAAGGGGGCGGAGCCTATGAAA
AACGCCAGCAACGCGCCTTTTACGGTCTCTGCGCTTTGCTGCGCTTTGCTCAGATGTAATGTGAGTTAGCTCACTC
ATTAGGCACCCAGGCTTTACACTTTATGCTTCCGCTCGTATGTTGTGTTGGAATGTGAGCGGATAACAATTTACACA
GGAACAGCTATGACCATGATTACGCCAAGCTACGTAATACGACTCACTAGGCGGCGCGTTTTAAACAATGTGCTCCTCT
TTGGCTTGCTTCCGCGGGCAAAGCCAGACAAGAACAGTTGACGTCAAGCTTCCCGGACCGGTGTAGCGGCGCGGA
ATTCCTGCAGGATTCGAGGGCCCCGAGGTCAATTTACCGGTAGGGGAGGCGCTTTCCCAAGGCACTCTGGAGCAT
GCGCTTTAGCAGCCCCGCTGGCACTTGGCGCTACACAAGTGGCTCTGCGCTCGCACACATTCCACATCCACCGGTAGCG
CCAACCGGCTCCGTTCTTTGGTGGCCCTTTCGCGCCACTTCTACTCTCCCTAGTCAGGAAGTCCCCCGCGCCCGC
AGCTCGCGTGTGACGAGCGTGACAAATGGAAGTAGCAGTCTCACTAGTCTCGTGAGATGGACAGCAGCGCTGAGCAA
TGGAAGCGGGTAGGCCTTTGGGGCAGCGGCCAATAGCAGCTTTGCTCCTTCGCTTTCTGGGCTCAGAGGCTGGGAAGGG
TGGGTCCGGGGCGGGCTCAGGGGCGGGCTCAGGGGCGGGCGGCGGAAGTCTCCGAGGCGCGGCAATATGGGATCG
GCTTCAAAAGCGCAGCTCTGCGCGCTGTTCTCTCTCTCTCCTCATCTCCGGGCTTTGACCTGACGCAATATGGGATCG
GCCATTGAACAAGATGGATTGACGAGGTTCTCCGGCGCTTGGGTGGAGAGGCTATTGGCTATGACTGGGCACAACA
GACAAATCGGCTGCTCTGATGCCGCGTGTTCGGCTGTGACGCGAGGGGCGCCGCTCTTTTGTCAAGACCGACCTGT
CCGGTGCCCTGAATGAACTGCAGGACGAGGCGAGCGGCTATCGTGGTGGCCACGACGGGCGTCTCTTGGCGAGCTGT
CTCGAGTTGTCATGAAGCGGAAGGGACTGGTCTATTGGCGAAGTCCGGGGCAGGATCTCTGTCTATCTCACCT

TGCTCCTGCCGAGAAAGTATCCATCATGGCTGATGCAATGCCGCCGCTGCATACGCTTGATCCGGCTACCTGCCCATTCG
ACCACCAAGCGAAACATCGCATCGAGCGAGCACGTACTCGGATGGAAGCCGGTCTTGTCGATCAGGATGATCTGGACGAA
GAGCATCAGGGGCTCGCGCCAGCCGAACTGTTGCCAGGCTCAAGGCGCGCATGCCGACGGCGATGATCTCGTCGTGAC
CCATGGCGATGCCTGCTTGCCGAATATCATGGTGAAAAATGGCCGCTTTTCTGGATTTCATCGACTGTGGCCGGCTGGGTG
TGGCGGACCGCTATCAGGACATAGCGTTGGCTACCCGTGATATTGCTGAAGAGCTTGGCGGCGAATGGGCTGACCGCTTC
CTCGTGCTTTACGGTATCGCCGCTCCCGATTTCGAGCGCATCGCCTTCTATCGCCTTCTTGACGAGTTCTTCTGAGGGGA
TCGATCCGTCCTGTAAGTCTGCAGAAATTGATGATCTATTAACAATAAAGATGCCACTAAAAATGGAAGTTTTCTCTGT
CATACTTTGTTAAGAAGGGTGAGAACAGAGTACCTACATTTGAATGGAAGGATTGGAGCTACGGGGTGGGGGTGGGGT
GGGATTAGATAAATGCCTGCTCTTACTGAAGGCTCTTACTATTGCTTTATGATAATGTTTCATAGTTGGATATCATAA
TTTAAACAAGCAAAACCAAATTAAGGGCCAGCTATTCTCCCACTCATGATCTATAGATCTATAGATCTCTCGTGGGAT
CATTTGTTTTCTCTTGATTCCCACTTTGTGGTTCTAAGTACTGTGGTTTCCAAATGTGTCAGTTTCATAGCCTGAAGAAC
GAGATCAGCAGCCTCTGTTCCACATACACTTCATTCTCAGTATTGTTTTGCCAAGTTCTAATTCATCAGAAGCTGACTC
TAGATCTGGATCCGGCCAGCTAGGCCGTCGACCTCGAGTGATCAGGTACCAAGGTCCTCGCTCTGTGTCCGTTGAGCTCG
ACGACACAGGACACGCAAAATTAATTAAGGCCGGCCCGTACCCTCTAGTCAAGGCCTTAAGTGAGTCGTATTACGGACTGG
CCGTCGTTTTACAACGTCGTGACTGGGAAAACCTGGCGTTACCCAACCTTAATCGCCTTGACGACATCCCCCTTTCCGC
AGCTGGCGTAATAGCGAAGAGGCCCGCACCGATCGCCCTTCCCAACAGTTGCGCAGCCTGAATGGCGAATGGCGCTTCGC
TTGGTAATAAAGCCCGCTTCGGCGGGCTTTTTTTT

FIGURE 3B (Continued)

FIGURE 6

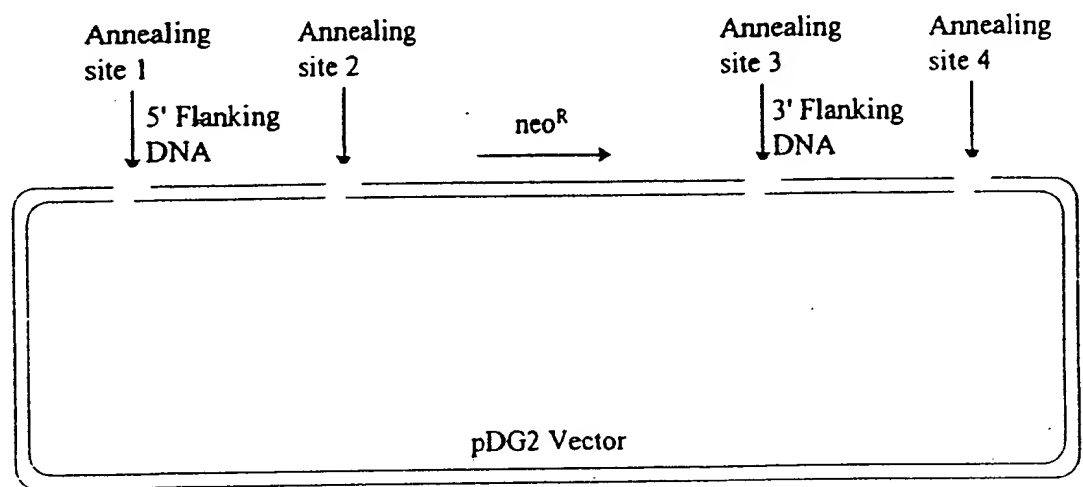
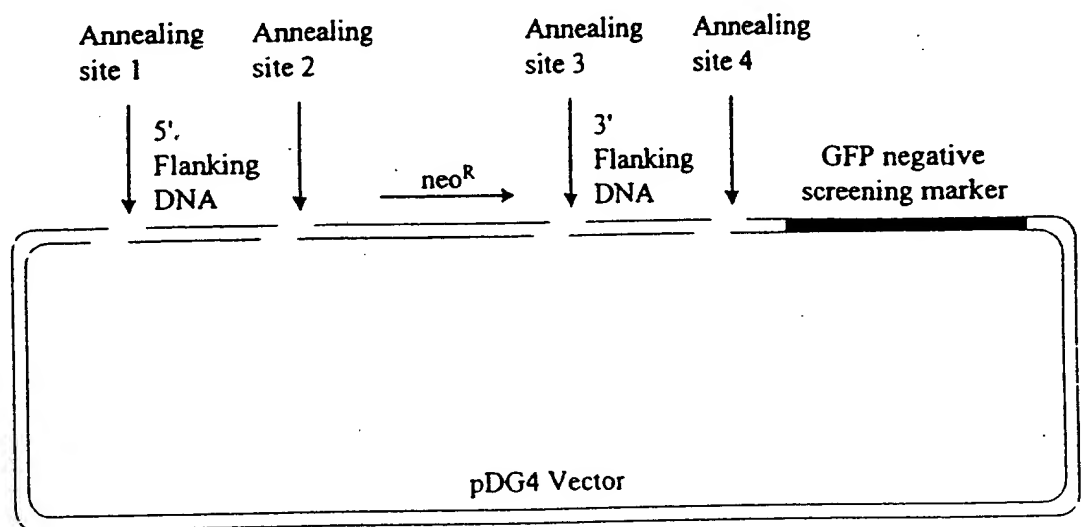


FIGURE 7



TCGGTTGGGCCCAGCAACTTCTAGCAAGCAGGCTACCCTTAGGACCATCCATATCCGATGAGCTCTACAG
TGGCTGCCTCCACTATGCCCTGTGTCTGTGGCGGCCTCCAAGAAGGAGTCTCCAGGTAGATGGGGCCTTGG
AGAGGATCCAACAGGTGTGGGCCCCCTCGCTCCAGTGCCGAGTGTGTGGGGACAGCAGCAGTGGGAAACAT
TATGGCATCTATGCCGTGCAATGGCTGCAGTGGCTTCTTCAAGAGGAGTGTGAGAAGGAGGCTCATCTACA
GGTGCCAAGTCGGGGCAGGGATGTGCCCAGTGGGATAAGGCCCATCGCAATCAGTGCCAGGCCTGCCGGCT
GAAGAAGTGC'TTACAAGCAGGCATGAACCAAGATGCTGTGCAGAAAGAGCGCCAACCTCGGAGCATGGCT
CAGGTCCACCTGGATGCCATGGAAACAGGCAGTGACCCCCGATCAGAACCAGTGGTAGCCTCTCCTGCTC
TGGCAGGGGCCAGTCCCCGGGGCCCCACGTCGTGTCTGCAACCAGAGCCATGGGGCCACCACTTTATGGC
CAGCCTTATCACCGCCGAAACTTGTGCTAAACTGGAGCCAGAGGACGCTGAAGAGAATATTGATGTCACC
AGCAATGACCCCCGAGTTCCCCGCATCCCCCTGCAGTCTGGATGGCATCCATGAGACATCTGCTCGCCTGC
TCTTCATGGCTGTCAAATGGGCCAAAACCTTGCCGTGTGTTTCCAAACCTGCCTTTCCGGGACCAGGTGAT
CTTGCTGGAAGAGGCATGGAATGAGCTTTTCTTCTTGGAGCCATACAGTGGTCTCTGCCCCCTGGACAGC
TGCCCACTGCTGGCACCACCTGAGGCGTCCGGCAGCTCTCAGGGCAGGCTGGCCTTGGCCAGTGCAGAGA
CGCGCTTCTTGCAGGAAACCATCTCCCGGTTCCGAGCTCTGGCAGTGGATCCCACAGAGTTTGCCTGCCT
GAAGGCCCTGGTCTCTTCAAACCTGAAACACGAGGCCCTGAAGGATCCTGAGCACGTGGAGGCTTTGCAG
GACCATCCAGGTGATGCTAAGCCAGCATAGCAAGGCTCACCAACCCAGCCAGCCTGTGAGGTTTGGGA
AATTGCTCCTCCTGCTCCCATCTTTGAGGTTCTTACGGCTGAGCGCATTGAGCTTCTCTTCTTCAGAAA
GACCATAGGGAACACTCCGATGGAGAAGCTCCTGTGTGACATGTTCAAAAAGTAGTTGGGAGTGCCAAGT
GTCCACAGGCACCCAGGGGGGCAGCACATCTTAGAAGCTAAATAGTTCCCTGCCTTTCTCAGCCAGTAAT
TCCACATTAGGTATTCTACCTAGCAGAAATTTCTCCCAAATATATTATTGGCATATTCATTGCCATC
CTAATCTTAATACCCCTAACTCTGCTTGGGCAGTAGAATGCATGGATGCGTTGTTATATTATAGGAGAA
ACAGCTTTGGCAA
(SEQ ID NO:19)

Targeting Vector (5' arm; 200 bp flanking neo insert):

AGACTGAAAGACAGACAGACAGACAGACAGGGGTTAAAGATGGATGCATCGGTTGGGCCCAGCAACT
TCTAGCAAGCAGGCTACCCTTAGGACCATCCATATCCGATGAGCTCTACAGTGGCTGCCTCCACTATG
CCTGTGTCTGTGGCGGCCTCCAAGAAGGAGTCTCCAGGTAGATGGGGCCTTGGAGAGGATCCAAC
(SEQ ID NO: 20)

Targeting Vector (3' arm; 200 bp flanking neo insert):

CTCCAGTGCCGAGTGTGGGGACAGCAGCAGTGGGAAACATTATGGCATCTATGCCTGCAATGGCTG
CAGTGGCTTCTTCAAGAGGAGTGTGAGAAGGAGGCTCATCTACAGGTGCCACAGCTCTGCCGGCCTG
CCCCGGTGTGCCTAGCACGGGTGGAGGGCGTTCAGGGAAAGCGGAAGACGAGACCAGGGCAAACA
(SEQ ID NO: 21)

FIG. 8